

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 7, line 7, with the following rewritten paragraph:

SEQ ID NO: 44 is the nucleotide sequence of the full-length acyltransacylase-O-acetyl transferase clone TAX6.

Please replace the paragraph beginning at page 7, line 9, with the following rewritten paragraph:

SEQ ID NO: 45 is the deduced amino acid sequence of the full-length acyltransacylase O-acetyl transferase clone TAX6.

Please replace the paragraph beginning at page 33, line 9, with the following rewritten paragraph:

~~An additional transacylase~~Another cDNA clone, TAX6 (SEQ ID NO: 44), was identified by using 40 ng of radio-labeled Probe 6 (SEQ ID NO: 11) to screen the *T. cuspidata* library. This full-length clone was 99% identical to Probe 6 (SEQ ID NO: 11) and 99% identical to the deduced amino acid sequence of Probe 6 (SEQ ID NO: 12), indicating that the probe had located its cognate.

Please replace the Abstract on page 57 with the following rewritten Abstract:

Transacylase enzymes of *Taxus cuspidata* and the use of such enzymes to produce Taxol™, related taxoids, as well as intermediates in the Taxol™ biosynthetic pathway are disclosed. Examples of specific enzymes described herein include taxadienol 5-O-acetyl transacylase (TAX1) and 10-deacetylbbaccatin III-10-O-acetyl transferase (TAX6). Also disclosed are nucleic acid sequences encoding the *T. cuspidata* transacylase enzymes. Specific non-limiting embodiments include nucleic acid sequences encoding 10-deacetylbbaccatin III-10-O-acetyl transferase.